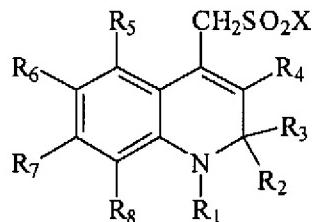


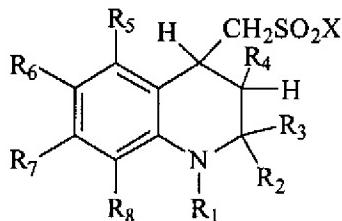
**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (currently amended) A Process for the production of dihydroquinoline compounds of the general formula Ia or of tetrahydroquinoline compounds of the general formula Ib



Ia

Ib

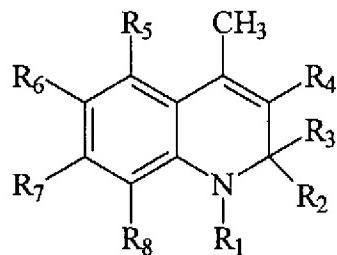


in which R₁ denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

R₂, R₃, R₄, R₅, R₆, R₇ and R₈ on each occurrence and independently of one another denote hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R₁ and R₈ together form a ring system and

X denotes OH, halogen, -O-R₉, -S-R₁₀ or -NR₁₁R₁₂ where R₉, R₁₀, R₁₁ and R₁₂ independently of one another denote hydrogen or a C1 to C20

hydrocarbon residue which can optionally contain one or more heteroatoms or/and one or more substituents,
~~characterized in that wherein~~
the corresponding compounds I'a

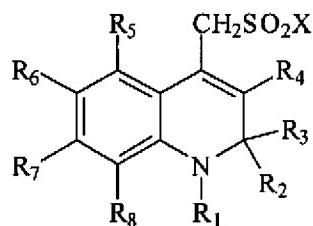


I'a

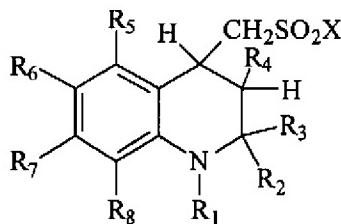
are sulfonated to form Ia ($X = OH$) and optionally converted by hydrogenation into Ib ($X = OH$).

2. (Currently amended) ~~The Process process~~ as claimed in claim 1,
~~characterized in that wherein~~
the sulfonation is carried out by means of concentrated sulfuric acid.
3. (Currently amended) ~~The Process process~~ as claimed in claim 1 or 2,
~~characterized in that wherein~~
the sulfonic acid group formed in the sulfonation is derivatized.
4. (Currently amended) ~~The Process process~~ as claimed in claim 3,
~~characterized in that wherein~~
the sulfonic acid group is converted into a sulfochloride.
5. (Currently amended) ~~The Process process~~ as claimed in claim 3 or 4,
~~characterized in that wherein~~
the sulfochloride group is reacted with a primary or secondary amine to form a sulfonamide.

6. (Currently amended) A Dihydroquinoline dihydroquinoline compound of the general formula Ia or a tetrahydroquinoline compound of the general formula Ib



Ia



Ib

in which R₁ denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

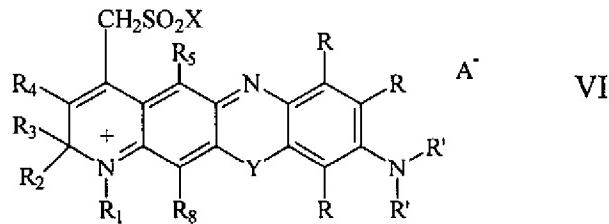
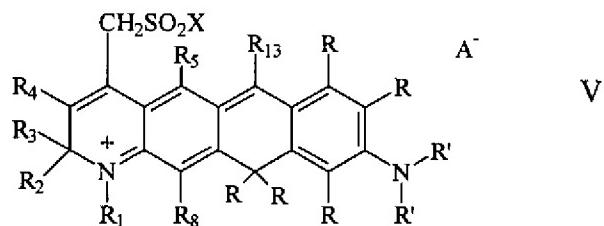
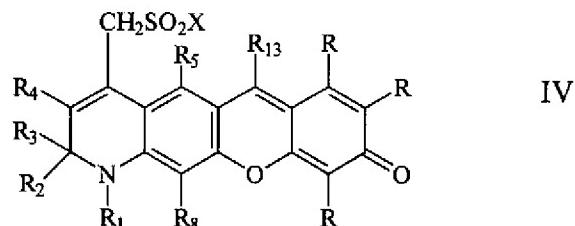
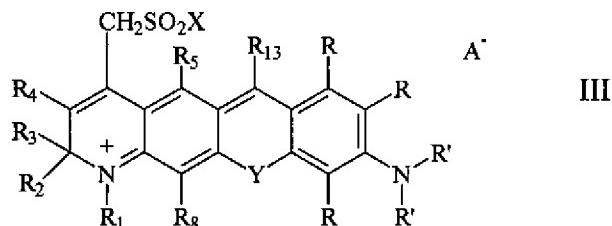
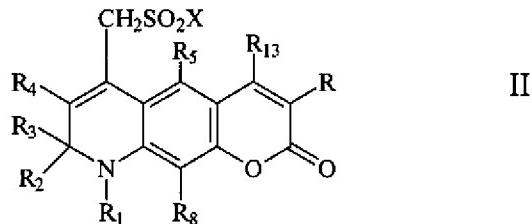
R₂, R₃, R₄, R₅, R₆, R₇ and R₈ on each occurrence and independently of one another denote hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R₁ and R₈ together form a ring system and

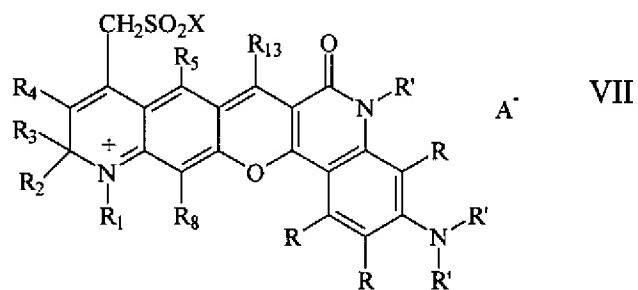
X denotes OH, halogen, -O-R₉, -S-R₁₀ or -NR₁₁R₁₂ where R₉, R₁₀, R₁₁ and R₁₂ each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms

or/and one or more substituents, in particular -SO₃H, -PO₃H₂ and -COOH.

7. (Currently amended) The Compound compound as claimed in claim 6, wherein R₁ represents an aryl or alkyl residue and in particular a C5 to C15 aryl or a C1 to C20 alkyl residue, R₂ and R₃ are methyl and R₄ denotes hydrogen.
8. (Currently amended) The Compound compound as claimed in claim 6 or 7, characterized in that wherein
R₇ represents a hydroxy or methoxy residue.
9. (Currently amended) The Process compound as claimed in claim 6 one of the claims 6 to 8, characterized in that wherein
R₆ represents a nitroso group.
10. (Currently amended) The Process compound as claimed in claim 6 one of the claims 6 to 7, characterized in that wherein
R₆ represents a formyl or a hydroxymethyl group.
11. (Currently amended) The Compound compound as claimed in claim 6 one of the claims 6 to 10, characterized in that wherein
X denotes halogen and in particular Cl.
12. (Currently amended) The Compound compound as claimed in claim 6 one of the claims 6 to 11, characterized in that wherein
X represents the residue -NR₁₁R₁₂ where the residues R₁₁ and R₁₂ are defined as in claim 6.

13. (Currently amended) A Process process for the production of dyes of the general formulae II to VII containing $-SO_2X$





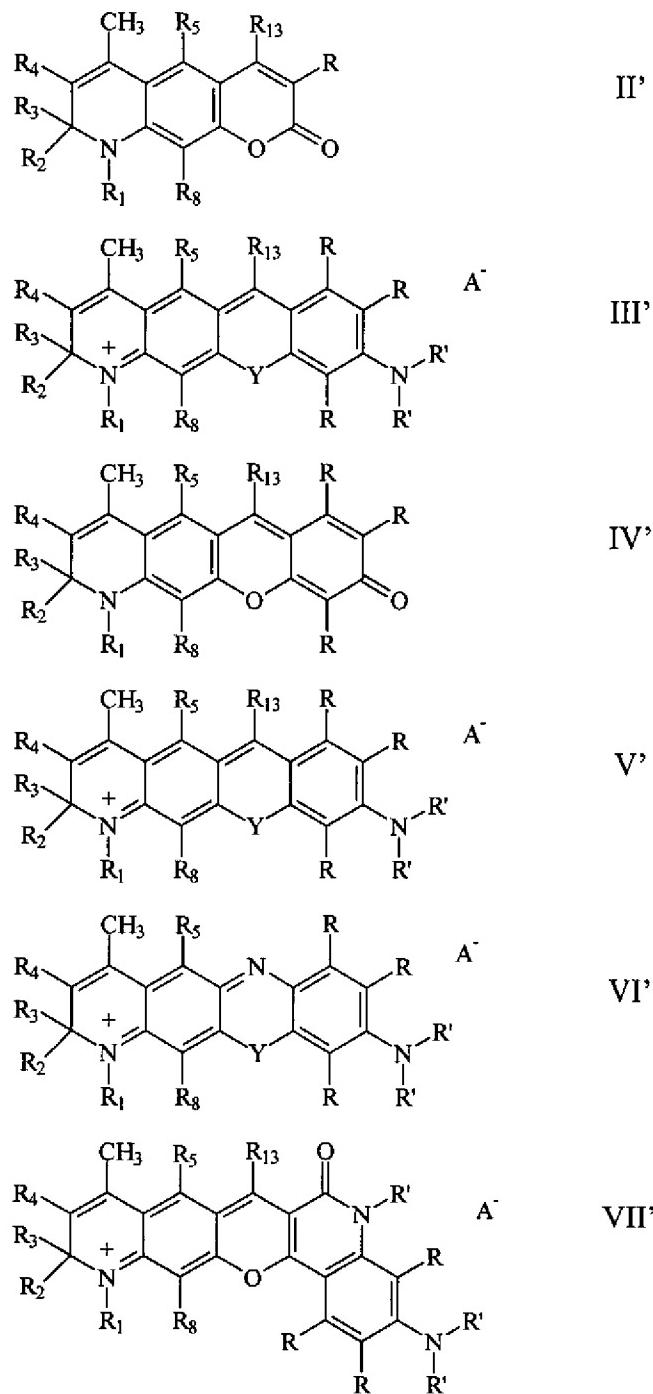
in which R₁, R₂, R₃, R₄, R₅ and R₈ are defined as in claims 1 to 12, R on each occurrence can be the same or different and is defined as for R₁, R₂, R₃, R₄, R₅ and R₈ and R' on each occurrence and independently of one another denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R and R' together form a ring system which can contain one or more double bonds,

R₁₃ on each occurrence and independently of one another denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, where R₁₃ in particular represents hydrogen, aryl, carboxyphenyl, alkyl, perfluoroalkyl, cycloalkyl, pyridyl or carboxypyridyl,

X denotes OH, halogen, -O-R₉, -S-R₁₀ or -NR₁₁R₁₂ where R₉, R₁₀, R₁₁ and R₁₂ each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or one or more substituents, and

Y in formula III denotes O, S or Se and Y in formula VI denotes O, S or C(R)₂, characterized in that, wherein

corresponding compounds of formulae II' to VII'

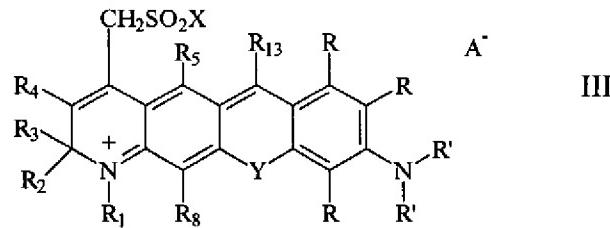
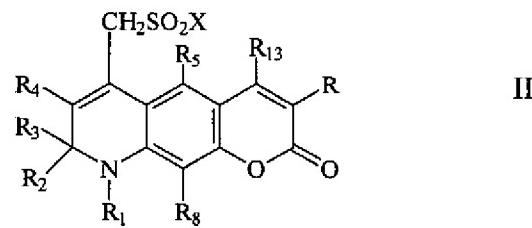


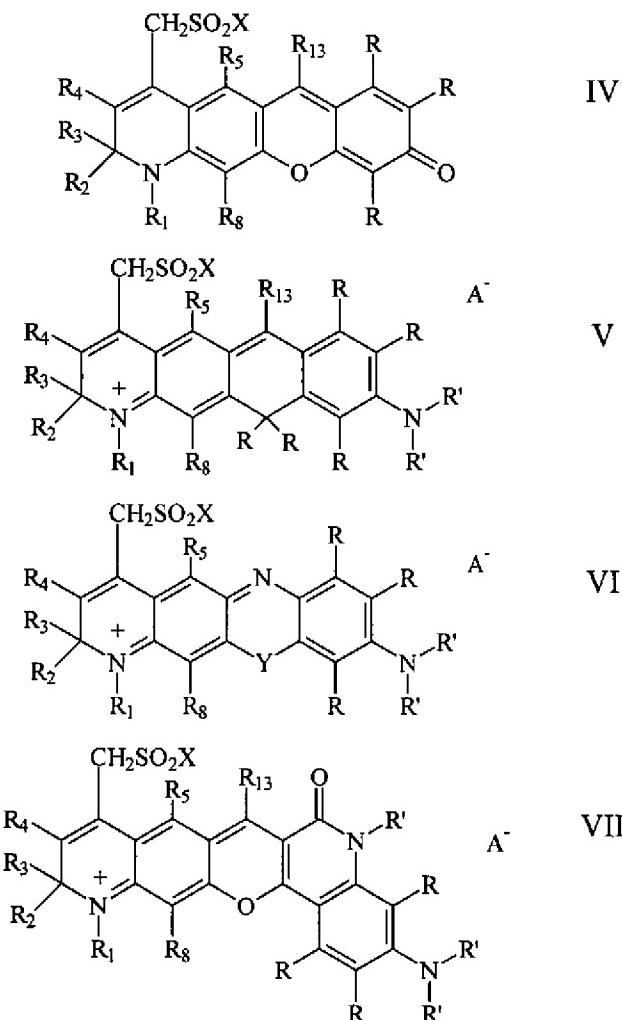
are sulfonated with the proviso that for compounds of formula III in which Y = O and for compounds of formula IV, X does not denote OH.

14. (Currently amended) A method for producing polycyclic dyes comprising

~~Use of using a compound as claimed in one of the claims 6 to 12 claim 6 or of a compound that is obtainable obtained by the process as claimed in claim 1 one of the claims 1 to 5 to produce polycyclic dyes.~~

15. (Currently amended) The method Use as claimed in claim 14 wherein the to produce polycyclic dyes are of formulae II to VII.
16. (Currently amended) A process Process for the production of polycyclic dyes, wherein characterized in that compounds which have a dihydroquinoline end group with a 4-methyl group are sulfonated and optionally hydrogenated to form a tetrahydroquinoline with the proviso that the polycyclic dye is not a compound of formula III in which Y = O and X = OH or of formula IV in which X = OH.
17. (Currently amended) The polycyclic Poly cyclic dye which is obtainable produced according to the process as claimed in one of the claims 13 to 16 claim 13.
18. (Currently amended) A polycyclic Poly cyclic dye of the general formulae II to VII





in which

R' denotes hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents,

R on each occurrence and independently of one another denotes hydrogen, halogen, a hydroxy, amino, sulfo, carboxy or aldehyde group or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, or the residues R' and R together form a ring system which can contain one or more multiple bonds,

R_{13} on each occurrence and independently of one another denotes

hydrogen or a hydrocarbon group with 1-20 C atoms where the hydrocarbon group can optionally contain one or more heteroatoms or/and one or more substituents, where R₁₃ in particular represents hydrogen, aryl, carboxyphenyl, alkyl, perfluoroalkyl, cycloalkyl, pyridyl or carboxypyridyl, X denotes OH, halogen, -O-R₉, -S-R₁₀ or -NR₁₁R₁₂ where R₉, R₁₀, R₁₁ and R₁₂ each independently of one another denote hydrogen or a C1 to C20 hydrocarbon residue which can optionally contain one or more heteroatoms or one or more substituents, and Y in formula III denotes O, S or Se and Y in formula VI denotes O, S or C(R)₂, with the proviso that the dye is not a compound of the general formula III in which Y = O and X = OH or of the general formula IV in which X = OH.

19. (Currently amended) The polycyclic Polycyclic dye as claimed in claim 17 or 18, wherein
~~characterized in that~~
X denotes halogen and in particular Cl.
20. (Currently amended) The polycyclic Polycyclic dye as claimed in claim 17 or 18, wherein
~~characterized in that~~
X represents the residue -NR₁₁R₁₂ where the residues R₁₁ and R₁₂ are defined as in claim 18.
21. (Currently amended) The polyacrylic Polycyclic dye as claimed in claim 20, characterized in that wherein
R₁₁ or/and R₁₂ represents an alkyl or aryl residue substituted with -COOH.

22. (Currently amended) In a method for the detection of an analyte in a sample, the improvement which comprises using a labeled receptor for the analyte, wherein the label is a compound Use of a dye as claimed in one of claim 18 the claims 17 to 21 to label an analyte.
23. (Currently amended) The method Use as claimed in claim 22, characterized in that wherein the analyte is a biomolecule and in particular a peptide or nucleotide.
24. (Currently amended) The method Use as claimed in claim 22 or 23, characterized in that wherein the labelling occurs by the dye is binding to an NH₂ or SH group of the analyte.
25. (Currently amended) The method Use of claim 22 wherein the label is a dye as claimed in claim 19 to label an analyte in which the dye is bound by coupling to an amino group of the analyte.
26. (Currently amended) The method Use of claim 22 wherein the label is a dye as claimed in claim 21 to label an analyte where and wherein the dye which is for example activated as an NHS ester is bound by coupling to an amino group of the analyte.
27. (Currently amended) The method Use of claim 22 wherein the label is a dye as claimed in one of the claims 17 to 24 claim 17 or is coupling to another dye.
28. (Currently amended) The method Use of claim 22 wherein the label is as claimed in claim 27, characterized in that wherein

it the label is coupled via an amino group of the other dye to thus form a FRET pair.

29. (New) The polycyclic dye as claimed in claim 19, wherein X denotes chlorine.